IN THE CLAIMS

Please amend the claims as follows:

Claims 1-13 (Canceled).

Claim 14 (New): A remote polling and control system in a heterogeneous wireless data transmission network for communication between a variety of wireless nodes interconnected via the network, comprising:

control means for polling data from remotely accessible nodes of a first type located in the network and/or remotely controlling functions executable by remotely controllable nodes of a second type, the nodes being in a stand-by mode before and after being called by the control means.

Claim 15 (New): A remote polling and control system according to claim 14, wherein the communication is organized according to the master-slave principle, and further comprising:

at least one master node including an RF transceiver configured to:

send a wake-up signal to at least one remote slave node of a first and/or second type for polling information detected by the slave node,

send control information for triggering a function to be executed by at least one remotely controllable slave node of the second type, and

receive feedback information from the slave nodes.

Claim 16 (New): A remote polling and control system according to claim 14, wherein the network is configured in a meshed, star or hybrid star, and meshed topology.

Claim 17 (New): A remote polling and control system according to claim 16, the network having a meshed topology for a peer-to-peer-based ad-hoc communication between wireless nodes, and further comprising:

a CSMA-based MAC protocol for guaranteeing collision avoidance when different nodes are trying to simultaneously transmit data.

Claim 18 (New): A remote polling and control system according to claim 15, wherein the remote slave node of the first type comprises:

receiving means for wirelessly receiving a wake-up signal indicating a need for transmitting a polling request message from the master node to the slave node,

transmitting means for wirelessly transmitting sensor data or requested status information to the master node upon reception of the polling request message by back-scattering an RF signal obtained by modulating an electromagnetic field provided by the master node or any other node with an encoded signal representing the status information, and

processing means for processing and creating dynamic data.

Claim 19 (New): A remote polling and control system according to claim 15, wherein the remotely controllable node of the second type comprises:

receiving means for wirelessly receiving a wake-up and remote control signal from the master node or another node of the second type,

optional sensor elements for detecting operational parameters of the slave node and/or environmental data and/or remotely controllable actuator elements for executing programmable actions,

processing means for executing a remotely controllable application running on the node for monitoring and gathering sensor data detected by the sensor elements and/or controlling the actuator elements, and

transmitting means for wirelessly transmitting information from the application to the master node upon reception of the wake-up and remote control signal.

Claim 20 (New): A remote polling and control system according to claim 19, wherein the remotely controllable slave node of the second type further comprises:

transmitting means for wirelessly transmitting data or requested status information upon reception of a polling request message from a further node by back scattering an RF signal obtained by modulating an electromagnetic field provided by the master node or any other node with an encoded signal representing the status information to the further node when being operated in a mobile ad-hoc network having a meshed topology and communicating with the further node on a peer-to-peer basis.

Claim 21 (New): A remote polling and control system according to claim 19, wherein the master node is connected to a bridge providing a wireless or wired communication link to at least one other master module.

Claim 22 (New) A method for enabling at least one master node of a remote polling and control system in a heterogeneous wireless network according to claim 19 to remotely control at least one slave node wherein the master node performs at least one of:

transmitting a wake-up and control signal for polling sensor data detected and/or data created and/or processed by a remotely accessible slave node of a first type located in the

range of the master node or any other node providing an electromagnetic field to be modulated by the slave node; or

remotely activating, controlling, and/or deactivating functions executable by a slave node of a second type, the slave nodes being in a stand-by mode before and after being called by the master node.

Claim 23 (New): A method according to claim 22, wherein the slave node of the first type performs:

wirelessly receiving a wake-up signal indicating a need for transmitting a polling request message from the master node to the slave node,

wirelessly transmitting data or requested status information to the master node upon reception of the polling request message by back scattering an RF signal obtained by modulating an electromagnetic field provided by the master node or any other node with an encoded signal representing the status information, and

executing commands upon reception of a wake-up and control message.

Claim 24 (New): A method according to claim 22, wherein the slave node of the second type performs:

wirelessly receiving digitally encoded polling and/or control information from the master node,

after having detected a valid identification code of the master node in a header of the received polling and/or control information, executing a remotely controllable application running on the slave node for monitoring and gathering operational parameters of the slave node and/or environmental data detected by sensor elements connected to the slave node and/or controlling actuator elements controllable by the slave node, and

wirelessly transmitting a digitally encoded version of the status information as a feedback signal to the master node.

Claim 25 (New): A method according to claim 22, wherein the slave node of the second type performs:

while not being in vicinity of a master node, wirelessly transmitting feedback information from an application running on the slave node to a further node upon reception of a wake-up and/or remote control signal from the further node, and

while being in vicinity of a master node, wirelessly transmitting sensor data or requested status information upon reception of a polling request message from the master node by back scattering an RF signal obtained by modulating an electromagnetic field provided by the master node or any other node in the network with an encoded signal representing the status information to the master node.

Claim 26 (New): Use of a remote polling and control system according to claim 14 for controlling applications running on nodes of a wireless sensor network.